

The Relationship between Motivation to Learn of Diploma Nursing Students and their Personal Characteristics

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Abstract

Background: Motivation to learn is the overall driving force of students that direct their learning activities. It has been broadly considered as the primary determinant of students' achievement, performance and success in school life. In this regard, students' personal characteristics could be contributing factors to motivation in learning context. **Aim of the study:** was to assess the relationship between motivation to learn of diploma nursing students and their personal characteristics. **Subjects and method: Research design:** A descriptive correlational design was used in the study. **Setting:** the study was carried out at all diploma/secondary nursing schools of Ismailia Governorate. **Subjects:** All diploma nursing students (189) at third grade was included in the study. **Tools for data collection:** Data were collected using Science Motivation Questionnaire in addition to diploma nursing students. **Results:** Most of diploma nursing students had low motivation level compared to other levels with statistical significant differences, although the highest percentages of them had positive family reaction for joining nursing school. Besides, their desire of joining nursing profession and helping others recorded of causes of joining nursing school compared to the desire for employment. **Conclusions:** Personal characteristic of diploma nursing students have/cause no statistical significant difference in relation to motivation to learn except gender. **Recommendations:** Motivation to learn needs taking measures regarding its improvement besides to further studies and finding out the deficiencies that lead to decreasing motivation level.

Keywords: Motivation to Learn, diploma nursing students' characteristics.

1. Introduction

Nursing students' nowadays are focusing on identifying and satisfying the needs and expectations of their students. As well as, good quality education provides better learning opportunities and suggests that levels of motivation to learn strongly affect student's success or failure (Butt & Rehman 2010). There are many factors could interfere with students' motivation to learn. In this regard, numerous researchers have indicated that personal characteristics are one of the most important determinants of

students' behavior and motivation to learn. Personal characteristics may be a sense of motivation, as it is considered to be a crucial factor in various contexts. It has been proposed that personal characteristics (e.g., gender, residence, and working during study) influence students' motivation to learn, and their impact is not the same in all learner (Ariani, 2013).

Motivation to learn is the overall driving force of students that lead their activities and provide direction on learning activities. Thus, motivation is born from the need to achieve

the goal (Asvio, 2017). Motivation to learn is important in determining how many students will be learn from a learning activity or how much to absorb the information presented to them. When students are motivated to learn something they will use higher cognitive processes in learning the material (Riswanto& Aryani 2017).

The motivation to learn is a multi-component dimension, which consists of types and attributes of motivation (Adamma et al., 2018). First dimension is intrinsic motivation to learn which is defined as the inner force that motivates students to engage in academic activities. They become interested in learning and enjoy the learning process as well. The students want to do it for themselves rather than expecting any award. Second dimension, extrinsic motivation to learn depicts external activities such as a reward, compulsion and punishment. An individual is extrinsically motivated if they are receiving any reward or under any pressure or compulsion. This kind of motivation provides a high level of will power and engagement yet it would not able to sustain longer than the intrinsic motivation can do (Akpınar & Dönder 2013& Gopalan et al., 2017).

Third dimension is personal relevance indicates that if the task on hand is important, relevant or connected directly to the needs of

the student either on a personal (any personal goals) or a professional front (career goals), students take more interest in accomplishing the task. Fourth dimension is Self-determination which is the ability of students to choose and control over what and how they want to learn. It is determined by how much control a student perceives he or she has over learning. It suggests that people innately strive for optimal stimulation, feeling competent and being self-determinant, or having a sense of control over their behaviors (Iyer, 2017& Chow & Yong 2013).

Fifth self-efficacy is described as the belief in one's capabilities to organize and execute the courses of action required to produce given attainments. Academic self-efficacy refers to the extent or strength of a student's perception regarding an ability to learn and perform academic tasks and reach goals. The last dimension is assessment and test anxiety. It is the form of anxiety that is specific to examinations and other situations of performance evaluation. It describes the tendency to appraise examinations as threatening and leaves the individual predisposed to experience elevated levels of state anxiety at times of evaluation and assessment (You et al .,2018& Putwain & Daly 2014).

1.2. Significance of the study:

Motivation to learn in nursing students is a determinant factor in achieving academic success and training competent nurses. Also, it has been one of the most complex and challenging issue facing teachers today (Rafii, 2019). In addition, during working with diploma nursing students, it was noticed that some of them have little interest in their learning and others feel little motivation and commitment to the nursing students'. So, it was important to assess levels of students' motivation to learn and how their personal factors could interfere with their motivation, to have a prospective for measures could be taken for students' motivation improvement.

2. Subjects and methods

2.1. Aim of the study:

Assess the relationship between motivation to learn of diploma nursing students and their personal characteristics.

The research objectives were to:

- 1- Determine level of motivation to learn of diploma nursing students.
- 2- Assess personal characteristics of diploma nursing students.
- 3- Identify the relationship between motivation to learn of diploma nursing students and their personal characteristics.

2.2. Study design:

A descriptive correlational design was used in the study.

2.3. Study setting:

The study was conducted at diploma/secondary nursing schools in Ismailia Governorate. They included 6 schools affiliated to Ministry of Health and Population (MOHP). They were Eltal El-Kabeer Secondary Nursing School (60 students), Ismailia Secondary Nursing School for male (30 students), Ismailia Secondary Nursing School for (30 students), El Mostakbal Secondary Nursing School (30 students), El-Kantra shark Secondary Nursing School (30 students) and El-Kantara gharb Secondary Nursing School (30 students).

2.4. Study subjects:

All nursing students (189) at third year of diploma/secondary nursing school in aforementioned settings were participated in the study after excluding of 21 students of the pilot study.

2.5. Tool of data collection:

Science Motivation Questionnaire (SMQ):

The questionnaire is developed by (Glynn and Koballa 2006). It aims to determine level of motivation to learn among diploma nursing students. SMQ is composed of 30 items which is divided into 5 items for

each subscale and is classified into six subscales. They are intrinsically motivated science learning⁽⁵⁾, extrinsically motivated science learning, relevance of learning science (5), self-determination of learning science (5), self-efficacy of learning science (5) and anxiety about science assessment (5). SMQ has construct validity and reliability coefficient (0.93). It had been translated into Arabic by (Hussien, 2014). The personal characteristics were asked regarding gender, residence, causes and family reaction for joining nursing school and others.

2.6. Field work:

Data were collected during the second semester of 2019–2020 during February, March, and April using self-administration. The researcher went to each school and conducted meetings with administrators of schools at first to take permission from them about collection of data. Then, the students were divided into groups for data collection after having their agreement to participate in the study, and explaining the nature of the study in addition to how to fulfill SMQ.

2.7. Pilot study:

A pilot study was carried out on 21 students (10% of the study participants) to check the applicability and feasibility of tools, to identify the obstacles and problems that may be encountered and take needed measures to manage these obstacles and

problems before starting of actual data collection. They were excluded from the study sample. The pilot study helped the researcher in estimating the time consumed for fulfilling the study tool which was ranged from 15 to 20 minutes.

2.8. Administrative design:

An official permission was obtained through pertinent authorities. This was achieved through a letter explaining the nature and procedures of the study addressed from the Dean of the faculty of Nursing, Suez–Canal University to the director study setting. Ethical approval was obtained from the research ethics committee of the faculty of nursing – Suez Canal University.

2.9. Ethical considerations:

Acceptance and informed consent had obtained from each participant. Participation in this study was voluntary. Each participant had the right to withdrawal from the study at any time without any consequence. Confidentiality of the collected data had been maintained. The results used as a component of the necessary research for master thesis, as well as for future publication and education. The topic of this study would not touch religious, ethical, moral and culture issues among participants.

2.10. Statistical design:

Data was analyzed using SPSS (Statistical Package for Social Sciences) version 22. Qualitative data was presented as number and percent and quantitative data was presented as mean \pm SD. Comparison between groups was done by Chi-Square test for qualitative data, and t and F/ANOVA tests for quantitative data. $P < 0.05$ was considered to be statistically significant

3. Results

Table (1) shows that female students had the highest percentage (87.3%) compared to male students (12.75%). Student who resides in rural area recorded more than half of the sample (58.7%), and student who working in nursing during study recorded the highest percentage (74.6%).

Figure (1) shows family reaction for joining nursing school. It was found that positive family reaction for joining nursing school recorded the highest percentage (73.5%).

Figure (2) represents relative working in nursing. It was found that students who haven't relative working in nursing recorded the highest percentage (81.5%).

Figure (3) illustrates cause of joining nursing school. It was found that desire of joining nursing profession and helping others recorded 59.8 % of causes of joining nursing

school compared to the desire for employment (40.2%).

Table (2) presents levels of subscales and total motivation to learn among diploma nursing students. It was found that the highest percentage at low level of motivation to learn was intrinsic motivation (94.7%) where the highest percentage at moderate level was self determination to learn nursing (34.9%). Besides, the highest percentage at high level was self- efficacy for learning (7.9%). However, most of students (79.9%) have low total motivation level compared to other levels with statistical significant differences.

Table (3) clarifies the relation between motivation to learn and personal characteristics. The results showed that there was statistically significant difference between male and female regarding their motivation to learn. Where there is no statistically significant difference between urban and rural area regarding their motivation to learn and there is no statistically significant difference between students' motivation to learn in relation to their work during study.

4. Discussion

Motivation to learn provides students with energy to learn, work effectively, and achieve their potentials at nursing school.

When learners are motivated during the learning process, things go more smoothly, communication flows, anxiety decreases and creativity and learning are more apparent (**Valerio, 2012**).

Regarding students' personal characteristics, the present study results showed that female student had the highest percentage rather than male students. This result agrees with Ata et al. ⁽¹⁶⁾, and may be as a result of nursing nature that is more suitable for women character of caring people. Beside, males are recently joining to nursing profession in Egypt. In addition, it was found that highest percentage of nursing students resides in rural area. This finding is in agreement with the finding of **Elsayes & Obied, (2018)** who showed that a high percentage of students were from rural area.

Moreover, the highest percentages of students were working during study. This is in agreement with **Güner, (2015)**. In addition, the highest percentage of students had no relatives working in nursing profession that is in contrast to **Sis et al. (2013)** who mentioned that students' decision for choosing the nursing profession was strongly related to having a relative who was a nurse as a model that might be effective in choosing the nursing profession. Also, the present study revealed that the highest percentage of nursing students join nursing

school for the employment purpose. This is consistent with **Elibol & Seren, (2017)** who said that the majority chose the nursing profession due to the ease to find a job.

Regarding to level of motivation to learn, it was found that intrinsic motivation to learn scored the highest percentage at low level of motivation to learn. This is in a line with **Cetin, (2016)** who found that intrinsic motivation to learn scored the highest percentage at low level of motivation to learn. The current study result may be referred that school systems could gradually decrease students' curiosity and interest in learning. In this regard, **Saedi & Parvizy, (2019)** pointed out that nursing students lose their satisfaction and interesting gradually during their program. In addition, extrinsic motivation in current study was slightly higher than intrinsic motivation. This could be interpreted by **Mathewson, (2019)** who stated that intrinsic motivators can be the key to student achievement but extrinsic motivation dominates classrooms. This could be supported by establishing a motivation system.

The current study results also pointed out that the highest percentage at moderate level is self determination to learn nursing and the highest percentage at high level was self-efficacy with statistical significant difference. These results are supported by **De Silva et**

al., (2018) for self-determination to learn nursing and by **Bryan et al., (2011)** for self-efficacy with statistical significant difference.

Totally, motivation to learn recorded its highest percentage at low level compared to other levels with statistical significant difference. This disagrees with **Ata et al. (2015)** in addition to **Chan & Norlizah, (2017)** and **De Silva et al., (2017)** who pointed out to moderately level of motivation to learn among nursing students as indicator to the average level of overall motivation. The low level of total motivation to learn in the current study may be referred to some factors as using traditional teaching methods in addition to teacher attitude in class that lead to lack of students' enthusiasm. In this regard, **Takase et al., (2019)** indicated to negative teachers' attitudes towards caring about students or being unenthusiastic about teaching as leading factors to decrease motivation to learn.

Regarding the relation between students' motivation to learn and their gender, the result of the current study revealed that there is statistically significant difference between male and female in regards to motivation to learn. This agrees with **Chan & Norlizah, (2017)** and disagrees with **Zeyer, (2018)** who showed that that gender had no direct effect on motivation to learn.

For the relationship between students' motivation to learn and their residence, it was found that there is no statistically significant difference between urban and rural area in regards to motivation to learn. This is in line with **Ziba et al., (2018)** that stated that there is no a significant relationship between the place of living and motivation to learn. This result may be due to that level of student motivation to learn doesn't depend on their students' residence rather than readiness to learn at diploma nursing schools.

Concerning the relationship between students' motivation to learn and their working during study, this study showed that there is no statistically significant difference between students' motivation to learn in relation to their work during study. This agrees with **Ata et al., (2015)** in addition to **Ziba et al., (2018)** who found that there was no statistically significant relation between students' motivation to learn and their working during study. The current study result could be explained as both students who working or not, entered nursing school because nursing profession seen as a job associated with high availability and good salary. Hence, this makes them having approximately the same motivation level.

Totally, the non-significant difference of personal characteristics concerning residence, causes and family reaction for

joining nursing school and others may mean that it doesn't matter for the diploma nursing students whether they were from urban or rural, or the reaction of their family toward nursing profession. That could give chance for students' independency in learning nursing and the profession later on, as they own selves who govern their learning and career and hence their autonomy enhancement when practicing nursing after graduation. However, they still need to be energized regard nursing education.

Besides, the non-significant difference of personal characteristics concerning causes of joining nursing school is considered indifference by diploma nursing students. They want to be nurses/practical nurses regardless the cause whether the cause is desire of joining nursing profession or helping others compared to the employment purpose. This assures on the need to improve motivation to learn.

Finally, being that most students having low level of motivation to learn although most personal characteristics recorded the highest percentages in addition to the non-significant difference of most personal characteristics; this may indicate to other factors that could contribute to motivation to learn out of desiring nursing profession. They may be related to learning environment within the diploma nursing school or the

educational program as a whole. Or, it may be related to other factors. All those points are recommended for further studies.

5. Conclusion

Most of diploma nursing students have low level of motivation to learn although the highest percentages of them have positive family reaction for joining nursing school, with desire of joining nursing profession and helping others. Besides, personal characteristics have/cause no statistical significant difference in relation to motivation to learn except Gender.

6. Recommendations

Motivation to learn needs taking measures regarding its improvement besides to further studies regarding studying relationship between motivation to learn and learning environment and/or educational program, and study factors interfering with motivation to learn among diploma nursing students to find out the deficiencies that lead to decreasing motivation level.

Measures used to improve motivation to learn could be such as conducting regular opinion polls among diploma nursing students to find out any deficiencies leading to decrease in their motivation level; developing respectful relationships between teachers and nursing student through giving students choices whenever possible; giving

regular and constructive feedback with regard to both positive and negative aspects of their performance; establishing motivation system for both academic and extracurricular achievements such as written

acknowledgement for students good behavior in nursing clinical area and/or for effective interaction in classroom.

Table (1): Percentage distribution of personal characteristic among diploma nursing Students (n=189).

Personal characteristic of diploma nursing students	No.	%
Gender		
• Male	24	12.7
• Female	165	87.3
Residence		
• Urban	78	58.7
• Rural	111	41.3
Working during study		
• Yes	141	74.6
• No	48	25.4

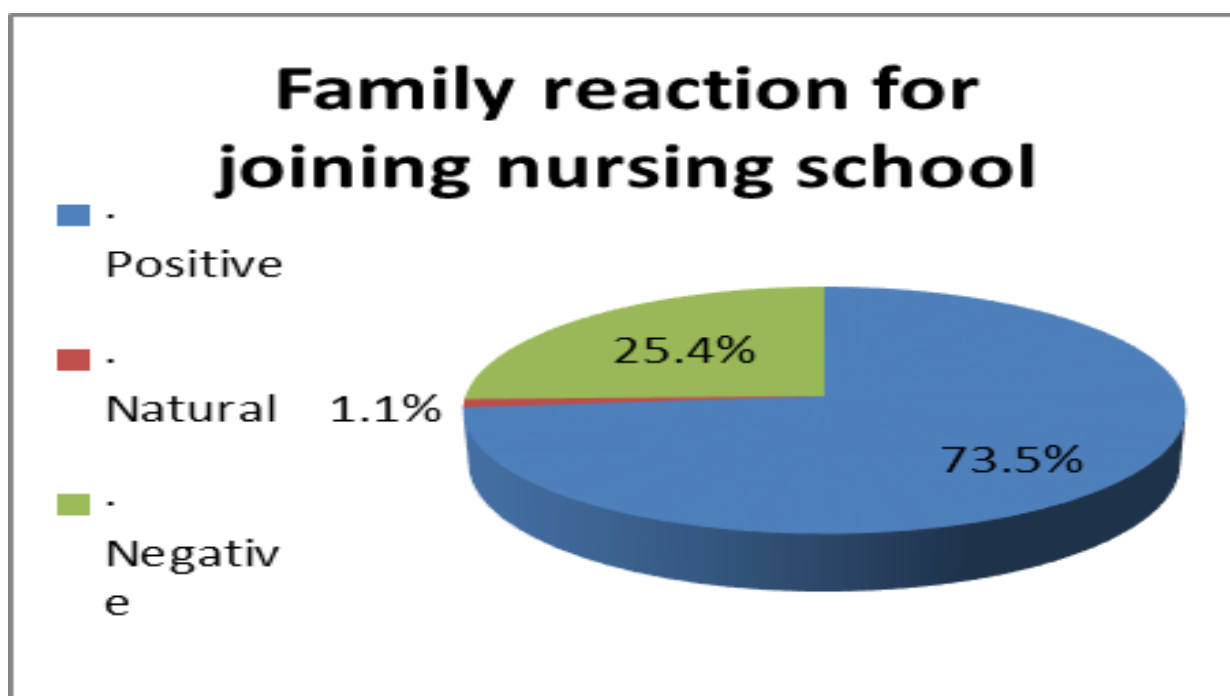


Figure (1): Family reaction for joining nursing school as a personal characteristic (n=189).

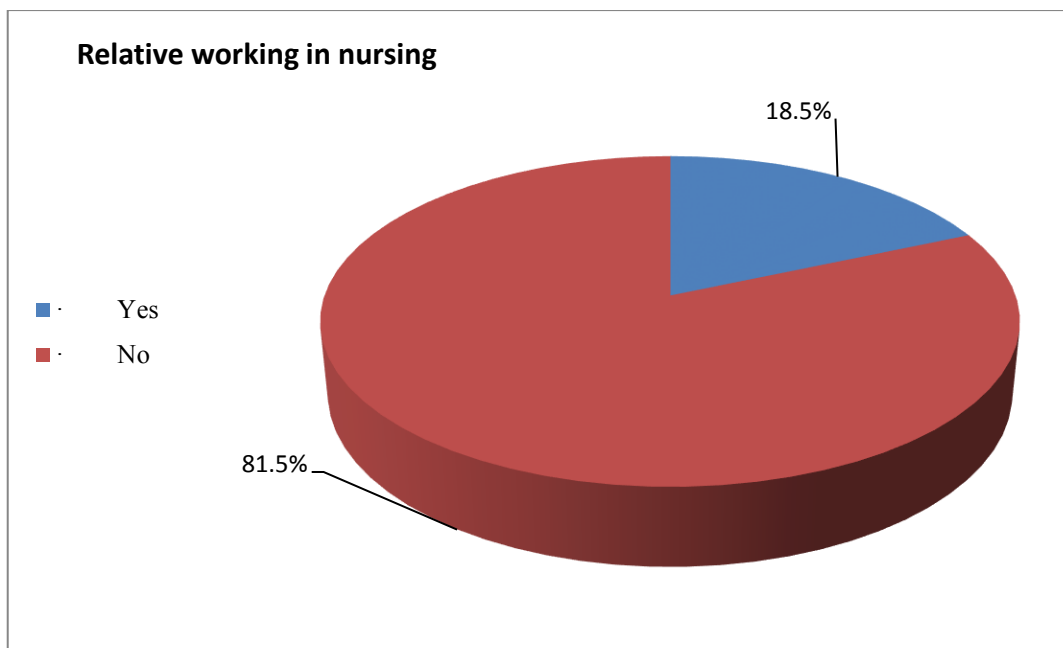


Figure (2): Relative working in nursing as a personal characteristic

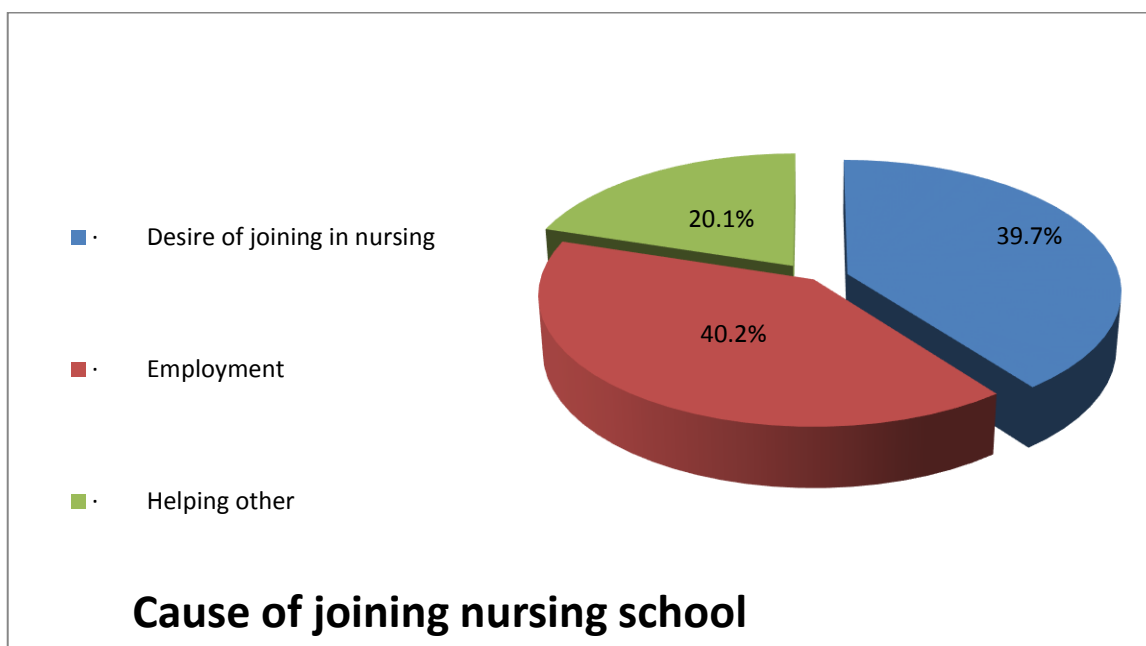


Figure (3): Cause of joining nursing school as a personal characteristic (n=189).

Table (2): Levels of subscales and total Motivation to learn among diploma nursing students (n=189).

Items	Low		Moderate		High		very high		Chi-Square Tests	
	No.	%	No.	%	No.	%	No.	%	X ²	P
Intrinsic motivation	179	94.7	10	5.3	0	0	0	0.0	151.1	.000
Extrinsic motivation	177	93.7	4	2.1	2	1.1	6	3.2	475.2	.000
Personal Relevance of learning	143	75.7	38	20.1	8	4.2	0	0	159.5	.000
Self determination to learn nursing	116	61.4	66	34.9	7	3.7	0	0	94.5	.000
Self-efficacy for Learning	129	68.3	45	23.8	15	7.9	0	0	110.8	.000
Anxiety about assessment	126	66.7	46	24.3	13	6.9	4	2.1	195.6	.000
Total motivation Level	151	79.9	38	20.1	0	0.0	0	0	67.5	.000

X² is chi-square test, P-value at <0.001

Table (3): Relations between motivation to learn of diploma nursing students and their personal characteristics (n=189).

Items	Mean	SD	Test	P value
Gender	Male	61.54	t=34.400	0.000
	Female	50.52		
Residence	Urban	51.36	t=0.969	0.326
	Rural	52.71		
Working during study	yes	51.53	t=0.963	0.328
	No	53.06		
Family reaction	Positive	52.67	F=1.950	0.145
	Natural	54.00		
	Negative	49.64		
Relative who working in nursing	Yes	51.34	t=0.164	0.686
	No	52.05		
Causes of joining nursing school	Desire joining nursing	52.36	F=0.175	0.840
	Employment	51.46		
	Helping other	51.97		

t is independent t test, F is one-way anova and P-value at <0.001

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